

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A network adaptor driver comprising:
a first interface for receiving data packets in a first order, wherein a first plurality of said data packets have a first destination address corresponding to a first destination and a second plurality of said data packets have a second destination address corresponding to a second destination that is different than said first destination, wherein said first destination address and said second destination address represent ultimate destinations of said first and second pluralities of data packets, respectively;
a second interface for transmitting said data packets to said first and second destinations; and
a mechanism for selecting from said data packets according to their respective destination addresses, said mechanism for establishing a second order for transmitting said data packets that is different from said first order, said second order based on respective destination addresses of said data packets, said second order comprising all of said data packets received in said first order, said second order established by first selecting ~~at least~~ one data packet having said first destination address and second then selecting ~~at least~~ one data packet having said second destination address, wherein said first selecting and said second selecting are alternated such that in said second order ~~during said transmitting~~ said data packets are alternately ~~essentially evenly~~ distributed between said first and second destinations.

2. (Previously Presented) The network adaptor driver according to claim 1 wherein said selecting is determined solely by said first and second destination addresses.

3. (Previously Presented) The network adaptor driver according to claim 1 wherein said selecting is determined partly by said first and second destination addresses and partly by when a data packet is received by said first interface.

Claims 4-5. (Canceled).

6. (Currently Amended) A method for improved network parallelism comprising:

receiving data packets in a first order, wherein a first plurality of said data packets have a first destination address corresponding to a first destination and a second plurality of said data packets have a second destination address corresponding to a second destination that is different from said first destination, wherein said first destination address and said second destination address represent ultimate destinations of said first and second pluralities of data packets, respectively;

prior to transmitting said data packets, establishing a second order for transmitting said data packets that is different from said first order, said second order based on respective destination addresses of said data packets, said second order comprising all of said data packets received in said first order, said second order established by first selecting ~~at least one~~ data packet having said first destination address and second ~~then~~ selecting

at least one data packet having said second destination address, wherein
said first selecting and said second selecting occur on alternate turns such
that in said second order during said transmitting said data packets are
alternately essentially evenly distributed between said first and second
destinations; and

transmitting said data packets.

7. (Previously Presented) The method according to claim 6
wherein said establishing is solely according to said first and second
destination addresses.

8. (Previously Presented) The method according to claim 6
wherein said establishing is determined partly by said first and second
destination addresses and partly by when a data packet is received by said
first interface.

9. (Previously Presented) The method according to claim 6
wherein said establishing is determined by a preset, nonadjustable scheme.

10. (Previously Presented) The method according to claim 6
wherein said establishing is determined by a programmable scheme which
takes into account differences in speed and performance paths to particular
destinations.

Claims 11-15. (Canceled).

16. (Currently Amended) A device comprising:

a first interface for receiving data packets in a first order, wherein a first plurality of said data packets have a first destination address corresponding to a first destination and a second plurality of said data packets have a second destination address corresponding to a second destination that is different from said first destination, wherein said first destination address and said second destination address represent ultimate destinations of said first and second pluralities of data packets, respectively; and

a second interface for transmitting said data packets to said first and second destinations;

wherein said device executes a driver that selects from said data packets according to their respective destination addresses, said driver for establishing a second order for transmitting said data packets that is different from said first order, said second order based on respective destination addresses of said data packets, said second order comprising all of said data packets received in said first order, said second order established by first selecting ~~at least~~ one data packet having said first destination address and second then selecting ~~at least~~ one data packet having said second destination address, said first selecting and said second selecting alternately continued through said data packets such that in said second order during said transmitting said data packets are alternately essentially evenly distributed between said first and second destinations.

17. (Original) The device according to claim 16 wherein said driver selects from said data packets solely by said first and second destination addresses.

18. (Original) The device according to claim 16 wherein said driver selects from said data packets partly by said first and second destination addresses and partly by when a data packet is received by said first interface.